

PATENT

Atty. Dkt. No. ZIMR0006

REMARKS

This is intended as a full and complete response to the Office Action dated October 31, 2005, having a shortened statutory period for response set to expire on January 31, 2006. Claims 1-44 are pending in the application. Claims 16, 17, 19-21, and 44 have been allowed. Claims 1, 3-4, 7-8, 9-12, 14, 16, 18, 22-23, 25-27, 31-33, 35-38, and 40-43 have been amended to more clearly recite aspects of the invention. Please reconsider the claims pending in the application for reasons discussed below.

Interview Summary

On January 25, 2006, a telephone interview was conducted with the Examiner, and Applicant's representatives: Randol Read, Marc Kraushaar, and David Parandoosh. During the interview, Applicant's representatives clarified that the references cited in the Office Action dated October 31, 2005 (*Ito et al.* U.S. Patent No. 6,372,612, hereinafter, *Ito* and *Iwai et al.* U.S. Patent No. 6,320,319, hereinafter, *Iwai*) are directed to thermal emitters and therefore, they are not related to field emitters as recited in the claims. Clarifying amendments, submitted herewith, were also discussed.

Claim Objections

The Examiner objects to claims 16, and 31-33, because of certain informalities. Applicant submits that the claims in their current amended form cure all informalities. Accordingly, Applicant respectfully requests the removal of the objection.

Claim Rejection – 35 U.S.C. § 112

Claims 4, 7, 8, 10-15, 18, 22-25, and 27-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner states that claims 15, line 2, "the array" lacks antecedent basis. Applicant disagrees with the Examiner. Claim 15 as previously presented has antecedent basis based on its dependency on claim 16. Further, Applicant submits that all other claims, in their

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current amended form, particularly point out and distinctly claim the subject matter presented and respectfully requests withdrawal of this rejection.

Claim Rejection – 35 U.S.C. § 102

Claims 1, 26, and 27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Ito*. In addition, claims 1-4, 26, 27, and 30-33 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Iwai*.

In this case, neither *Ito* nor *Iwai* disclose each and every element as set forth in the rejected claims. For example, neither *Ito* nor *Iwai* discloses a field emitter beam source comprising a first voltage disconnecting switch for disconnecting a first voltage source from a current source, wherein the first voltage disconnecting switch is adapted to switch between a voltage control mode and a current control mode, as claimed in independent claims 1 and 27.

Ito and *Iwai* are both directed to thermal emitters, and as such, they are not related to field emitter beam sources of the claimed invention. Importantly, thermal emitters described in these references operate in a substantially different fashion than field emitters used in field emission beam sources of the claimed invention. For example, none of the switches shown in these references are adapted to switch a field emitter beam source between a voltage control mode and a current control mode.

Accordingly, Applicant submits claims 1 and 27, as well as those claims that depend therefrom, are allowable and respectfully requests the withdrawal of this rejection.

Allowable Subject Matter

Claims 5, 6, and 9 are objected to by the Examiner as being dependent upon a rejected base claim but would be allowable if rewritten in independent form. Applicant thanks the Examiner; however, Applicant believes that all claims are allowable over prior art for reasons discussed above. Accordingly, Applicant respectfully requests the allowance of these claims.

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Claims 16, 17, 19-21, and 44 have been allowed by the Examiner. Applicant thanks the Examiner for allowance of these claims.

Conclusion

Having addressed all issues set out in the Office Action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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